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Administrator,

I am pleased to have Jennifer Orme-Zavaleta join us in the ORD Front Office this week to start the ORD leadership transition.

Hot issues

TSCA Support

ORD continues to provide support to OPPT for the successful implementation of the revised TSCA. This week ORD provided an update on chemical prioritization efforts to OPPT management. ORD is assisting OPPT with the development of several options for pre-prioritization activities. Materials describing these options are being prepared during October and will be made publicly available in early November in support of a public stakeholder meeting to be held in early December. Also in support of the agency's implementation of TSCA, ORD is involved in a series of discussions to improve exposure estimates used in TSCA related activities. A workshop focused on chemical exposure from consumer products was held in September. A workshop focused on occupational exposure is scheduled on October 12 and an additional workshop on ambient exposure is scheduled on October 31

Upcoming Events

US-German Bilateral Working Group. Today ORD, OLEM and OITA met with German Colleagues as part of the US-German Bilateral Working Group. The goal of the meetings is for our German Colleagues to provide background on a new DE-US.net initiative and discuss potential projects and activities of mutual interest building on a 25-year relationship under the US German Bilateral Working Group.

Accelerating the Pace of Chemical Risk Assessment Workshop

October 8-12 several EPA scientists will participate in the 2nd Accelerating the Pace of Chemical Risk Assessment Workshop, hosted by the European Chemicals Agency (ECHA) in Helsinki. EPA hosted a workshop last year with US and international governmental organizations to develop case studies for determining ways to use new approaches to evaluate chemical safety. During the meeting, the progress on these case studies will be presented and there will be discussions about applying new approach methods for different regulatory decisions such as prioritization and screening level assessments. ORD will present four joint case studies involving EPA, ECHA, European Food Safety Agency (EFSA), Health Canada, Singapore Agency for Science, Technology, and Research (A*STAR), and INERIS on topics from the evaluation of the utility of using high-throughput toxicity data to provide a conservative estimate of doses causing adverse effects in traditional animal models, to advancing exposure models for lead, and using new approach methods to better understand the toxicity of PFAS chemicals.

Beta testing CyAN Mobile App

ORD has started to beta testing the CyAN mobile application and near-real time Sentinel-3 satellite data for the contiguous U.S. Satellite data acquired through the European Space Agency are processed by NASA before being transmitted by EPA through the app to the stakeholders. At this time, ORD, Office of Water, several EPA Regions, US Army Corps of Engineers, Ohio EPA, California Water Board, and South Florida Water Management Division are testing the app and providing review comments.

Tour of the EPA Experimental Stream Facility (ESF), Milford, OH

On October 9, Ohio State Representative Doug Green will tour ESF. ESF is shared with Clermont County, OH, which maintains its own testing labs for samples related to county wastewater facilities. It is common for county officials to arrange informal tours to showcase their programs that are operated out of the facility, as well as collaborative research between the county and EPA. A key example of this is the East Fork Watershed Cooperative which involves ORD, U.S. Department of Agriculture, Army Corps of Engineers, U.S. Geological Survey, Ohio EPA, Ohio Department of Agriculture, Clermont County Soil and Water Conservation District, and local farmers.

Prescribed Burn Research in Southern Oregon

On October 10 ORD will participate in a prescribed burn with the U.S. Forest Service. The objective of this effort is to use aerial and ground-based plume sampling technology to characterize emissions from prescribed burns of grass and Ponderosa Pine plots located in the Sycan Marsh in southern Oregon. The work will calculate more accurate and condition-specific emission factors for this ecosystem type, which includes representative species commonly found in western wildfires. Data from these experiments will contribute to the validation of the current Fire Emission Production Simulator model and to speciation profiles used in smoke emission inventory development and air quality modeling.

State and Superfund Support: Field studies to support remediation at Sylvester Superfund site, Nashua, NH, October 17

Region 1 has requested support in evaluating the continued effectiveness of remedial actions at the Sylvester Superfund site as part of their upcoming five-year review. ORD will assist Region 1 and New Hampshire Department of Environmental Services in identifying and evaluating potential implications of any changes in hydraulic gradients since the remediation system (a subsurface slurry wall surrounding the site with a low-permeability cap on top) was implemented. They will conduct field research to provide performance verification for groundwater containment and facilitate evaluation of new monitoring tools to measure groundwater seepage flux. The Sylvester site is a former solvents storage and disposal site with groundwater and soil contamination from compounds that include arsenic, benzene, trichloroethane, metals, volatile organic compounds and others.

Last week Highlights

Idaho Congressman learns more about ORD's Water Security Test Bed

Last week Greg Sayles and I, and our colleagues at Idaho National Lab (INL) were invited to meet with Idaho Congressman Mike Simpson and his staff to discuss ORD's Water Security Test Bed (WSTB) and other ORD research conducted at INL. This gathering was a follow up to Congressman Simpson's visit to the WSTB in August. With the backdrop of numerous, high-impact water system incidents across the U.S. over the past few years, the meeting gave us the opportunity to highlight the great need for applied water infrastructure research, how current efforts at the WSTB are providing water utilities proven techniques to deal with water emergencies, and our visions to expand the capabilities of the facility in the future.

ORD Support for the City of Flint's water system model

ORD representatives delivered and installed EPANET-RTX hardware and software in the City of Flint's water system that allows utility managers and operators to access system data via a smart phone. EPANET-RTX also helps to integrate utility SCADA data with a hydraulic network model for real-time prediction of system wide flows, pressures, and water quality. Accuracy of real-time predictions was established through an extensive model calibration process, leading to improvements in the Flint model and enhanced confidence in its use. Real-time predictions of hydraulics and water quality were also instrumental in identifying issues that led to longer storage times and degradation in water quality. ORD continues to work to transition these technologies to the City of Flint.

Organization for Economic Cooperation and Development (OECD) Validation Management Group

Last week ORD attended a meeting hosted by the OECD Validation Management Group- Non-Animal and Endocrine Disruptors Testing and Assessment Advisory Group. The OECD works with member countries and stakeholders to cooperatively assess the hazards of industrial chemicals. ORD is providing scientific technical advice and sharing expertise on validation of in vitro assays for evaluating the toxicity of chemicals and using high-throughput in vitro screening to identify potential endocrine disruptors. EPA's participation in these OECD meetings builds international collaborations which helps to leverage global expertise and resources to develop faster and better approaches for assessing chemicals for potential health effects.

Superfund Support to Region 3

Today, ORD presented an overview webinar of technical support and research activities for contaminated sites to Region 3 Remedial Program Managers and technical staff. The presentation addressed plans, activities and research that directly relates to Superfund site analysis or clean-up.

Air Division Directors Meeting

ORD attended the Fall Air Division Director's meeting (9/27-29 in Seattle, WA) and presented an overview of the Air Research program along with future program directions. The presentation stimulated considerable discussion and further confirmed interest by EPA Regions in wildland fire research. During face-to-face discussions with Region 10 staff, they strongly emphasized the critical importance of better tools, data, and understanding of the health and environmental impacts of wildland fires. They pointed to the severe air (and water) quality problems caused by wildland fire this summer.

Tribal Research

STAR grantee, the Yurok Tribe Environmental Program, has completed development of their Yurok Local Environmental Observer as a hub of the Alaska Native Tribal Health Consortium (ANTHC) Local Environmental Observer Network (LEO). A functioning app is now available for download to both Apple and Android products. The LEO network was developed through support by EPA to the ANTHC, and is "a tool that allows local practitioners of traditional knowledge to capture and share environmental observations and changes." These observations help remote Arctic communities communicate with one another and with experts in universities and governments, and can also be used by industry and other stakeholders to understand the current weather and climatic situation in areas where monitoring data is sparse.

Superfund

ORD provided technical comments to Region 9 on the site evaluation work plan for the El Paso Natural Gas Mines near Cameron, AZ. The review focused on the sampling methodology in the work plan, which is important for ensuring that the large rural area is adequately evaluated for radium-226 concentrations.